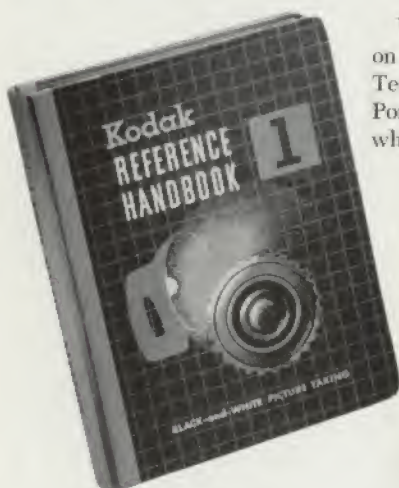


KODAK*photo notes*

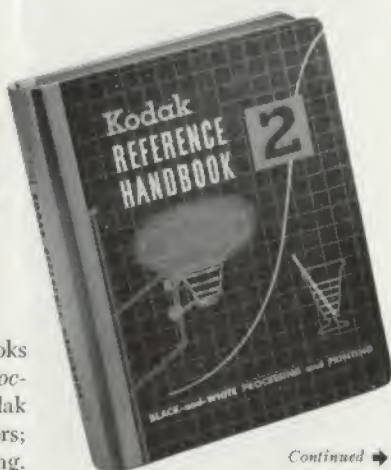
for registered owners of the
Kodak Reference Handbook
and the
Kodak Photographic Notebook

New Two-Volume Kodak Reference Handbook

The *Kodak Reference Handbook* was literally bursting to the point where something had to give. So, like the elemental amoeba, it did the obvious—split in two. Now we have twin volumes devoted essentially to black-and-white photography.



Volume 1 contains Kodak Data Books on topics related to picture *taking*—Flash Technique; Kodak Lenses, Shutters, and Porta Lenses; Kodak Films (black-and-white); and Filters and Pola-Screens.



Volume 2 contains Kodak Data Books on topics related to black-and-white *processing and printing*—Enlarging with Kodak Materials and Equipment; Kodak Papers; Processing and Formulas; and Copying.

Continued ➔

Each book is bound in the familiar, de luxe, Mult-O-Ring-type binder for easy insertion of additional related data books of your choice. Additional tabbed separators are included to help you keep new material conveniently organized. Registration cards are included in each of the new volumes. However, it is only necessary to register for *Kodak Photo Notes* once, whether as an owner of the old or new handbooks or the notebook.

The two new Data Books included in this new two-volume issue of the *Kodak Reference Handbook* are described on the following pages. The *Kodak Films Data Book* has been revised as described on page 3.

The new Kodak Reference Handbooks are available separately at Kodak dealers. List price: \$4.00 each.

New Kodak Data Books

Flash Technique and *Enlarging with Kodak Materials and Equipment* are the titles of two new publications now available either separately or in the new two-volume *Kodak Reference Handbook* from Kodak dealers.

Flash Technique contains 64 pages devoted to the technique of making better flash pictures. Picture-taking technique is emphasized as we believe that most readers will already be at least partly familiar with the mechanics and principles of ordinary

flash photography. Special attention is given to flash at and away from the camera; multiple flash; flash with daylight and sunlight (indoors and outdoors); flash with color film; a special open-flash technique; controlling lighting contrast with flash; slave units; and electronic flash. Many special flash-picture situations are discussed. Sections follow on exposure and how to determine your own flash-exposure guide numbers, the mechanics of flash, and how to make your own outlet box for pilot and multiple flash. There are exposure tables for supplementary flash, extreme close-ups, and flash-exposure guide numbers, and finally, some tips on maintenance and safety. Liberally illustrated. List price: 50¢ at Kodak dealers.

Enlarging with Kodak Materials and Equipment. Whether you are a novice or an old hand at enlarging, this new, 56-page Kodak Data Book offers helpful advice on making better enlarged prints.

It follows the enlarging process, step by step, beginning with cleaning and masking the negative, through "straight" print making, and on to control methods which so often mean the difference between a passable and a top-quality print. It covers not only the basic matters of proper paper-grade selection, print processing, and finishing, but also the advanced procedures of combination printing, vignetting, dodging, etc. Finally, there is a section about enlarging lenses which includes reducing and enlarging tables; hints on improvised reductions using Kodak Porta Lenses; and technical data. List price: 50¢ at Kodak dealers.



Revised Publications



The *Kodak Films Data Book*, 6th Edition, an extensive revision, should replace the films section in your single-volume *Reference Handbook*. The sections on

the Characteristic Curve and Density Scale have been rewritten to make them more useful to the practical photographer. The section on Storage and Care of Films has been revised in accord with the most recent improvements in film packaging, and all information on the Data Sheets has been brought fully up-to-date, even to the addition of data on the new Kodak Royal Pan Film. Most illustrations have been changed. List price: 50¢ at Kodak dealers.



The *Kodak Materials for Aerial Photography Data Book* has been revised and brought up-to-date. The materials described are those supplied for professional-type aerial

cameras. Data are included on the new Kodak Infrared Aerographic Film. List price: 50¢ at Kodak dealers.

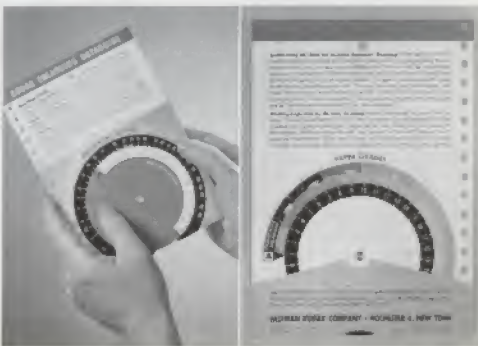
Kodak Photographic Plates for Scientific and Technical Use

This Data Book has been completely revised and rewritten, new information has been added, and curves have been replotted to twice the previous scale. A descriptive list of commercially available films and plates which can often be used in place of special-order plates has been added. List price: 50¢ at Kodak dealers.

The New Kodak Enlarging Dataguide

An unusual feature of this new Kodak Dataguide makes allowance for the change in effective speed of papers at long exposure times. At low light-intensity levels, the exposure time needed is longer than computation based on light intensity alone would indicate. Low intensity results from a high magnification, a small lens opening, or a negative of high density. The Dataguide allows for all these causes. To determine this effective speed change, Kodak research workers made an extensive study of all Kodak enlarging papers. They found the effect in each followed a quite similar pattern, and a close average was established and carried over into the new Kodak Enlarging Dataguide.

As before, new exposure times for any change in magnification or lens opening can be found quickly. Also, photographers having a densitometer or Kodak Densiguide (\$1.00 at photo shops) can compute exposures from density measurements without making a test exposure for every print. Density measurements applied to this computer can also be used for determining the grade of paper to use. Instructions are included, as well as a high-contrast line negative for critically sharp focusing and checking magnification and enlarger sharpness. List price: 75¢ at Kodak dealers.



Be Certain With B-C Flash

You are probably familiar with the advantages of B-C power supplies for flash photography—how the extra-powerful 22½-volt batteries last and last—how the capacitor builds up a reservoir of current and releases it with a sudden surge of strong, dependable current for positive synchronizing and firing.

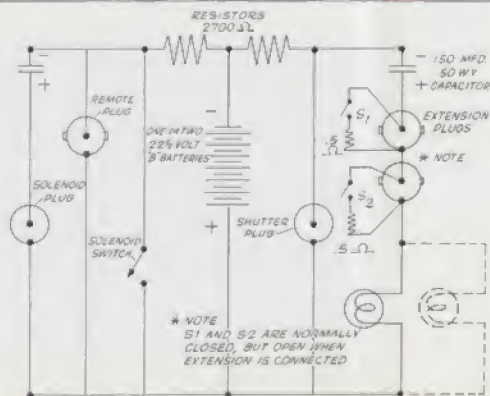
There are two basic types of battery-capacitor circuits, "open" and "closed." In the "closed" type, which is satisfactory for 22½-volt operation, the capacitor is normally fully charged. The Kodak B-C Flashholder circuit is of this type.

In the "open" type of circuit, such as the 45-volt Kodak Ektalux circuit, charging begins only when flash bulbs are inserted in the flashholder sockets. Charged capacitors are bound to leak some current. In the case of the 22½-volt "closed" system, the leakage is very small and can be ignored. But when the voltage is increased, the leakage becomes significant enough to cause an appreciable drain on the batteries. Hence the use of an "open" circuit in the Kodak Ektalux system, because an empty capacitor obviously cannot leak current.

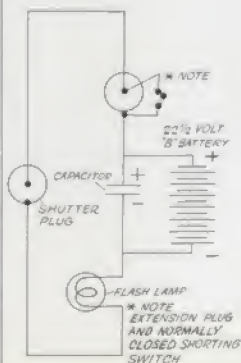
Because the B-C system is so good, extravagant claims are sometimes made regarding the number of bulbs or length of extension wiring a particular system will handle. Such claims mean nothing unless all electrical values and the quality of performance are specified. The Ektalux system, for example, uses a 150-microfarad capacitor in its bulb circuit. Using two batteries to get 45 volts, the capacitor will reliably fire and synchronize fifteen flash bulbs (without line and contact resistance and not using the new low-resistance bulbs). Now add 240 feet of No. 22 extension wiring (six 20-foot, 2-wire cables and 24 rhodium-plated contacts, with a total resistance of about 12 ohms), and the reliable limit is seven bulbs—one at the camera and six in extension units. With the new quick-break filament bulbs as many as 12 bulbs in extension units can be fired reliably. SM, SF, No. 5, No. 25, and some of the larger bulbs are now made with this type of filament. These limits hold for any other system which uses the same electrical values and contacts of the same quality.

(Continued on page 8)

Kodak Ektalux Circuit



Kodak B-C Flashholder Circuit



How To Use The Kodak Ektalux Press Bracket With Other Than Press Cameras

The Ektalux Press Bracket will, when required, instantly release the Ektalux Flashholder from its firm anchorage to the side of a press camera. This feature is valuable to the photographer working under pressure who suddenly finds it necessary to hold his flash away from the camera.

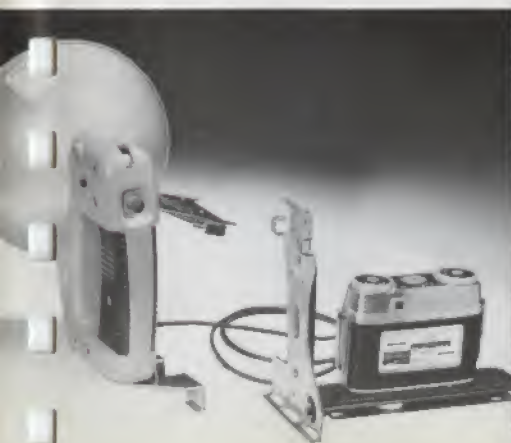
While one section of the press bracket is usually fastened permanently to the press camera, this section can be fastened, instead, to an L-bracket or reflex bracket, as is shown in the photo. In the example shown, the flash-holder plate was removed from the L-bracket by taking out the two attaching screws. This was then used as a template to locate the two holes to be drilled into the Ektalux Bracket. The holes should be located so that the Ektalux Bracket will be properly centered over the width of the L-bracket. The lower section should extend below the L-bracket enough to form a level platform for the camera and flash holder.

The other sections of the Kodak Ektalux Press Bracket are fastened to the Ektalux Flashholder in the normal way. See your dealer for suitable brackets.

Kodak Solution A For Kodak Special Developer SD-19a

In a previous article, "The Low-Down on Higher Film Speeds," in the Number 1, 1952, *Photo Notes*, we discussed the use, advantages, and limitations of Kodak Special Developer SD-19a for greatly increasing film speeds. We recommended that it be used only when severe under-exposure is absolutely unavoidable. We have been deliberately conservative in pushing the use of Kodak SD-19a because its use introduces some loss in definition, a higher base fog, and more likelihood of fingerprints, abrasion marks, etc. However, many professional people who must make pictures in dim light have been enthusiastic about their results with this developer. Since the results please them, they will probably satisfy others who find that the most sensitive films still need to be squeezed a little occasionally. (Continued on page 8)

Picture taken from the catwalk high over the basketball floor with natural light at 1/350 second at 1/2.5 on Kodak Super Panchro-Press Film, Type B. Negative was tank developed in Kodak Special Developer SD-19a for 15 minutes at 72 F. Picture by Dwight R. Furness of Evanston Photographic Service. Note the basketball in midair.



This 'n That

New Flash Bulbs Will Flash with Less Current. Miniature flash bulbs, such as SM, SF, No. 5, and No. 25, and some of the larger bulbs are now made with a new quick-break filament which requires less current to fire the lamp. More positive firing results. This is especially important if the batteries have passed their peak strength. In multiple flash, the same setup will fire more flash bulbs. For example, we normally recommend, for dependable firing, that no more than 7 bulbs be used at one time with Kodak Ektalux equipment, but with these bulbs, 12 can be fired.

An Unusual Use for Kodascope Transparent Reel Cans. Users of the "45" type of records have found that the 400-ft., 16mm Kodascope Transparent Reel Can makes a practical file for their single records. Each container holds about a dozen records.

2 x 2-inch Slides with the Kodak Chevron Camera. While this camera normally makes 2½ by 2½-inch negatives and transparencies, the \$4.75 Kodak 828 Adapter for Kodak Chevron Camera enables it to make 28 by 40-mm negatives or transparencies. The camera viewfinder contains a built-in mask for the 828 field size.

Since the Kodak Ektar lens used on the Kodak Chevron Camera has about one and a half times the focal length of lenses used on 828 and 35mm cameras, you get a mild telephoto effect on the miniature-size film. You can, therefore, get close-ups without having to move in so near the subject. This results in pleasing perspective. After Koda-

chrome Film 828 is processed, it is usually mounted in standard 2 by 2-inch mounts for projecting in viewers and projectors; color prints can also be made from these transparencies.

Kodak Photo Resist is used not only by name-plate makers, photoengravers, photolithographers, color TV-tube makers, but also for producing printed electrical circuits more efficiently and accurately. The process is streamlined because the exposure time is less than with conventional plate-coating materials and is not changed by changes in atmospheric conditions, and because the resist can be coated months ahead of the actual exposure.

Perhaps others could use this new material to their advantage if they knew about its properties. It can be processed conveniently and quickly in a tray. It can also be processed in an ordinary vapor degreaser, with the usual trichloroethylene solvent. It can be dyed. It resists all commonly used acids and alkalies. It resists cyanide plating baths. It requires no "burn in" to adhere to metal. It contains no chromium salts, which are known sometimes to irritate the skin. It is not based on bichromated gelatin, silver halides, or diazo dyes. As a matter of fact, it is based on a photosensitive substance never previously used. Kodak Photo Resist, Developer, and Dye, along with complete instructions for use, are sold by Kodak Graphic Arts dealers. For the address of your nearest dealer, write to Eastman Kodak Co., Graphic Arts Division, Rochester 4, N. Y.

WHAT'S NEW?



*a glimpse of some
recent Kodak products
for better photography*

Kodak Royal Pan Film

This new member of the Kodak sheet-film family is noteworthy in several respects. First, although it is a high-speed film with an American Standard Exposure Index of 200 for daylight, and 160 for tungsten, it has low graininess — no greater, in fact, than that of Kodak Super Panchro-Press Film, Type B. These conservative ratings allow for full exposure and complete shadow detail. If a thinner negative is preferred, the ratings can be adjusted upward. The sensitometric curve shows a sharp toe portion and a long density scale, indicating a wide exposure latitude. The shape of the curve's shoulder shows that Royal Pan Film gives excellent separation in the highlight areas. This becomes very important if development must be forced to compensate for underexposure. It is also very important if the lighting ratio is high. The film also exhibits two additional characteristics: It minimizes the danger of excessive contrasts because of development errors, and it has what emulsion researchers call "increased acutance," that is, pictures made with it appear sharper. The extra latitude in both exposure and development is of great

value and has been appreciated by those who have trade-tested this film.

The high-quality results achieved with Royal Pan Film make it a superior negative material for commercial, portrait, press work, etc., or anytime high speed is required with high quality. A fuller description is included in the new, 6th edition of the Kodak Films Data Book. Kodak Royal Pan Film is priced no higher than regular Kodak sheet films.

Kodak Transparency Illuminator 10 x 10

For the critical and fair evaluation of transparencies, they should be viewed by everyone concerned under the same lighting conditions. In the production of a color advertisement, for example, the color transparencies should be viewed under the same standard light by the layout artist, photographer, copyman, reproduction specialists, and editor, or there will be no common basis for resolving differences of opinion.

A constant, even light is also a big help in developing critical judgment of negatives and transparencies. The low cost of this high-quality illuminator brings this ideal light source within the reach of any photographer.

Kodak Transparency Illuminator
10 x 10. List price: \$14.50

Kodaslide Pocket Viewer.
List price \$1.95

Kodaslide Ready-File.
List price \$1.95



Be Certain With B-C Flash

(Continued from page 4)

A battery-capacitor system operating at 22½ volts, with a 120-mfd capacitor and no line resistance, will safely fire only three bulbs; a 200-mfd capacitor, five bulbs; and a 280-mfd capacitor, seven bulbs. Doubling the value of the capacitor merely doubles the bulb capacity, with considerable increase in capacitor bulk; doubling the battery voltage *quadruples* the bulb-firing ability for a given capacitor. That is why, for maximum

performance with minimum bulk, the Ektalux system operates at either 22½ volts with one battery, or 45 volts with two batteries. Corrosion-resistant, rhodium-plated connectors are used—an important detail.

The three Kodak B-C systems are:

	List Price
Kodak B-C Flashholder	\$10.40
Kodak Flashholder Extension Unit	11.00
Kodak B-C Flashpack (replaces 2 C-cells in any flash holder)	2.95
Kodak Ektalux Flashholder with Standard Bracket and 15-inch bayonet connector cord	29.75

Kodak Solution A For Kodak Special Developer SD-19a

(Continued from page 5)

To make it easier to obtain this developer, we have made available on special order through Kodak dealers Kodak Solution A for Kodak Developer SD-19a. When 1 ounce of this solution is thoroughly mixed with 1 quart (or 30 cc with 1 liter) of regular Kodak Developer D-19, you have Kodak Special Developer SD-19a. Develop conventional high-speed negative materials in this solution at 75 F for 8 to 12 minutes with inter-

mittent agitation. Best speed increase is generally found at a development time that gives a base fog around 0.40. Solution A contains hydrazine dihydrochloride, which promotes development of some silver halide grains that have not actually absorbed light photons, and 6-nitrobenzimidazole nitrate, an antifoggant.

	List Price
Kodak Developer D-19, 1-gal	\$.90
3½-gal	2.73
Kodak Solution A for Kodak Developer SD-19a, 1-qt	2.65

Bring your Handbook up-to-date by replacing outdated sections with the latest editions of these Kodak Data Books sold by Kodak dealers:

Kodak Lenses, Shutters, and Portra Lenses—Fourth Edition, 1952

Kodak Films—Sixth Edition, 1954

Filters and Pola-Screens—Copyright 1950

Kodak Papers—Fifth Edition, 1951

Processing and Formulas—Fourth Edition, 1952

Copying—Fourth Edition, 1947

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